Understanding User Privacy Behavior in Jordan on Facebook

Nancy Alajarmeh

Tafila Technical University, Tafila, Jordan

Abstract
Social Networking Sites (SNSs) have become enormously prevalent around the globe in recent years. User-Generated Content (UGC) constitutes the main asset that SNSs rely on. Privacy concerns towards the UGC that SNSs maintain are among the downfalls of using SNSs. While attitudes, norms, and values that are shared among individuals of any particular region of the world form their own culture, these cultural properties are found to significantly influence and shape the use, motive, and behavior individuals tend to exhibit on SNSs. To this time, very little information has been published about User Privacy Behavior (UPB) on SNSs in the MENA region. This paper presents a study of UPB of Jordanian users (i.e., part of the MENA region) on Facebook: the world's most known and used SNS. A total of 272 persons participated in this study by completing a survey about UPB on Facebook. The findings in this study indicate that while users in Jordan exhibit medium to high privacy concerns, they are still not making use of many privacy-related settings in Facebook.

Key words:
Social Networking Sites, Privacy Concerns, User Privacy Behavior, Trust, Usage Behavior, Security.

1. Introduction

Boyd and Ellision define a SNS as a "web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system" [1]. SNSs have indeed defined a new era of communication between individuals around the world. These phenomenon platforms [2] which facilitate novel means of social interaction have grown tremendously around the globe in recent years [3]. The user base and volume of interaction data that flows across borders among a wide spectrum of users are extremely enormous [4]. Facebook [5], the world's mostly used SNS, gives an evidence of the massive amount of social interaction taking place on SNSs [6]. As of June 2016, Facebook reported that there are 1.13 billion active users worldwide who access Facebook on a daily basis while 1.71 were reported to be monthly active users [6]. Facebook is a global phenomenon that 84.5% of its daily active users reside outside the US and Canada [6]; Facebook is available in more than 70 translations as of 2016 [5]. According to the Arab Social Media Report in 2015, Jordan came second in the MENA region in terms of social media penetration with 89% of social media users in Jordan use Facebook, of which 93% access Facebook on a daily basis [7]. Preference for Facebook as a top SNS was highest in Jordan (i.e., 63%) among other MENA countries according to the report [7].

The popularity of SNSs and their usefulness come for different reasons. In general, SNSs are perceived to facilitate new forms of communication (i.e., synchronous and asynchronous) between individuals for a range of purposes [2, 3] while affording unique engaging experience [7]. The reliance on SNSs for social interaction comes in the first place by their definition and services provided [2]: a communication sphere in which individuals send messages, share information (i.e., text, images, audio, and video), and connect with each other beyond geographical boundaries. Through SNSs, individuals belong to virtually-formed communities through sharing perspectives and responding to others [8], for example Facebook groups. Moreover, SNSs allow people to seek knowledge regarding trending issues, events and topics popping locally and globally [8]. The roles of SNSs extend to involve the facilitation of professional communication (e.g., LinkedIn), establishment of new means for marketing, and transformation of traditional ways of business accomplishment [2]. However, while the perceived usefulness of SNSs is high and sometimes exaggerated, downfalls are also present [9, 10]. Privacy concerns are among the downfalls of SNSs [11]. To relate to privacy concerns, we highlight two main constructs in SNSs: self-identification and UGC. Social self-identification is an essential part that a user demonstrates when using SNSs. In any SNS, a user maintains a unique profile that embodies his/her own social networking entity or being [12]; users create and manage their own personal profiles to identify themselves. User profiles on SNSs contain personal information (e.g., name, gender, address, occupation, phone number, interests, political views, religion, etc.) and personal photos. Besides self-identification, SNSs build on UGC; individuals contribute different kinds of content on their SNSs reflecting their personal characteristics and perspectives [13]. UGC is essential to endure the popularity and financial value of SNSs [3, 6, 7]. A large proportion of this content along with self-identity (i.e., referred to as user's personal SNS page) serves as a source to derive user's personality and habits [7, 14] and therefore

Manuscript received August 5, 2016
Manuscript revised August 20, 2016

is critically confidential that should not be exposed publicly. Even within one's own network, friends are not equally trusted to have full access to profile information [15]. The real threat of exposing confidential information without supervision on SNSs is that these information constructs can be compromised in different ways, such as identity theft, cyber bullying, cyber stalking, reusing personal photos and information for malicious purposes, abuse, and recrimination because of declared opposite opinions to name a few [15]. However, users often neglect to pay attention to these issues on SNSs. For example, it has been reported that a considerable percentage of US Facebook users admitted their unawareness of available Facebook's privacy tools [16]. In addition, the fact that information from user accounts can be gathered and dismissed to unknown parties without their knowledge was unfamiliar to many users who actively use Facebook [16].

Despite the exponential evolution of SNSs around the globe, the usage of such platforms along with motives, behavior, and patterns are heavily influenced by users' cultural and social aspects (i.e., norms, codes, values, and behaviors) which, to a wide extent, vary from one part of the world to another [17]. Research also confirms that this applies on UPB (i.e., how a user handles privacy and how he/she is concerned about that) [2, 3, 11]. The literature has revealed that privacy concerns on online platforms differ from one country to another [11]. It has been also confirmed that cultural aspects influence how individuals perceive and make privacy-sensitive decisions on SNSs [2]. However, the explosive growth in SNSs has not been accompanied with enough understanding of UPB in any country in the MENA region. This paper presents a study of UPB in Jordan: a Middle Eastern country where a mixture of individualism and collectivism, with a favor of the latter, outlines the societal cultural traits there. By doing this and reporting results to officials, we aim at increasing the awareness of privacy-related matters among users, and thus upping the level of privacy protection against possible misuses of UGC on SNSs.

2. Literature

Intentions to use, motives, and patterns of communication on SNSs have been widely studied (e.g., [18], [19], [20]). The "Uses-and-Gratifications" perspective was employed to explain the intentions to use new media [21, 22, 23]. As "Uses-and-Gratifications" perspective emphasizes on that psychological needs form the stimuli of media use, different studies built on that perspective to uncover the motives behind using SNSs (e.g., [24], [12]). Due to the growing cultural diversity among SNSs users, different studies investigated cross-cultural difference in the usage patterns on SNSs. The majority of studies in this domain confirm that (1) usage motives, behavior, and patterns of SNSs are heavily influenced by users' cultural and social aspects [17, 25]; (2) the intrinsic stimuli behind the use of SNSs may vary vastly from one culture to another, affected by the prevailing norms and values that originate from the culture itself [1]; (3) as SNSs rely heavily on UCG [13, 26], the noticeable differences on SNSs among people who come from different backgrounds are attributed to their profound cultural characteristics, such as social orientation and cognitive patterns they adopt [25]; and (4) in SNSs, cultural differences overshadowed demographic variables such as age and gender in determining how people on SNSs tend to behave during socializing, seeking information, and connecting to others within the network [25]. Research confirms that this applies on user privacy concerns as well, and the effect of cultural aspects on the perception of privacy has been examined in various studies [26]. For instance, based on Hofstede's cultural dimensions, a tight relationship between cultural values and privacy concerns was concluded in [27]. According to [27], power distance, individualism, and masculinity increase the overall level of information privacy concerns while uncertainty avoidance has the opposite effect. As Gudykunst in [28] recognized "individualism/collectivism" as the utmost influential cultural dimension on trust and communication, members from collectivistic cultures are found to be more concerned about privacy than members from collectivistic cultures [29]. People from individualistic cultures according to [29] are likely to have more strangers in their social networks and they are less likely to release their personal information than people coming from collectivistic cultures. Many studies used "individualism/collectivism" cultural dimension to reveal differences in UPB on SNSs. For example, a study uncovered cultural differences between the US and Korea in the deceptive behavior on SNSs [30]. According to [30], Koreans employed deception more than Americans and they exhibited a tendency to tell false information about their job, salary, and physical appearance. In the same study, Americans were found to provide false information regarding where they lived, their age, and interests [30]. In [2], privacy-related attitudes and behaviors varied significantly between American, Chinese, and Indian users on SNSs. Americans were more privacy-concerned than Chinese users, followed by Indians who exhibited the least privacy concerns. The results are explained by the individualistic culture prevalent in the US compared to the collectivistic society in China and India which was somewhere in between. In the same study (i.e., [2]), Chinese came first in terms of the desire to restrict access to their information on SNSs such that only a proportion of their social graph can see their personal information. Chinese exhibited higher concerns about identity related matters such as fake names and impersonation; this in

particular was suspected to be a result of the firm government regulations and supervision [2]. In [10], American were found to be significantly more cautious about online privacy on SNSs than their Indian counterparts in a cross-cultural study that targeted college students in the US and India. Americans were concerned about sharing certain types of information (e.g., surnames and email addresses) on SNSs compared to Indians [10]. At the same time, American students provided information on SNSs that relates to their self-identity [10]. Indians were more apt to communicate when contacted by strangers (i.e., those outside their close social network) [10]. To reject unwanted communications that were initiated by foreigners, Americans simply ignored these requests while Indians explicitly asked foreigners to stop contacting them [10].

The study presented in [31] observed that Americans exhibit higher privacy concerns compared to their German counterparts. French users, as opposed to their counterparts from Hong Kong, were less relaxed in personal information dissemination and Facebook for them was not trusted to protect privacy as concluded in [3]. Therefore, French users published less personal content while users from Hong Kong exhibited higher tendency to share their contact information and personal content [3]. The differences in self-disclosure between Germany and the US on SNSs were investigated in [32]. The results showed that users from Germany exhibited high uncertainty avoidance and they were concerned about privacy that they limited their self-disclosure. In contrast, users from the US exhibited low uncertainty avoidance and as a consequence they were not concerned about reducing self-disclosure on SNSs [32]. The literature to date has not addressed UPB of users in the MENA region.

3. Experiment Procedure

This study was intended to address UPB of users in Jordan on SNSs. The research approach in this study had a quantitative design and was conducted as an online survey, adopted from the research methodology used in [11]. An online survey was launched in April 2016 based on a survey conducted by [11] in order to understand and address UPB on SNSs in Jordan. The survey was announced through several Facebook personal accounts, groups and pages that belong to the local society of Jordan, and popular local forums as well.

3.1 Participants

As of July 2016, 318 persons from Jordan in the age between 15 and 53 years completed the survey. Of the 318 responses, 46 were filtered out because of invalidity or missing large proportion of the data items included in the survey. Of the remaining valid 272 responses, 156 were females (i.e., 57%) and 116 were males (i.e., 43%). Table 1 summarizes the respondents' demographical profiles, their preferred SNSs, their frequency of using SNSs, visibility of their Facebook profiles, and more.

Table 1: Demographical profiles of respondents

Item	***Data***
Gender	116 Males (i.e., 43%), 156 Females (i.e., 57%)
Average age	28.25
Education	5 PhD, 21 Master, 146 Bachelor, 47 H.School, 53 Other
Profession	Students, Business/Industry, Engineers, Teachers, Journalists, etc.
Internet usage	Regular, almost daily
Frequently used SNS	Facebook followed by Twitter then Instagram
Average years of having Facebook profile	3.4
Average hours spent on Facebook per day	1.9
Visiting frequency	Several times a day to several times a week
How public is your profile on Facebook	26.7% visible to anyone 59.1% visible to friends only 14.2% don't know

3.2 Survey Instruments

After collecting respondents' basic information and their visiting practices on SNS (i.e., Part1 in the survey as illustrated in the previous section), this study surveyed their UPB on Facebook in the rest of the survey. According to [11], UPB on SNSs consists of five builds: : (1) "Friends and Relationships", (2) "Trust and Confidence on SNSs", (3) "Privacy Concerns on SNSs", (4) "Self-Disclosure on SNSs", and (5) "Control over Personal Information on SNSs" [11]. Therefore, the survey was prepared according to those constructs and it involved the following parts besides Part I on basic information:

- **Part II**. Focuses on the first of the five constructs of this study: "*Friends and Relationships on SNSs*". Respondents were asked to point out to the number of friends they have on Facebook and the percentage of those with whom they are friends with in reality.
- **Part III.** Focuses on the second of the five constructs of this study: "*Trust and Confidence on SNSs*". This part included two subparts: "*Trust in Facebook*" and "*Trust in Facebook users*". Respondents were asked to specify their agreement level to different statements using Seven Point Likert-type scale (i.e., from 1 (Strongly Disagree) to 7 (Strongly Agree)).
- **Part IV.** Focuses on the third of the five constructs of this study: "*Privacy Concerns on SNSs*". This part included two subparts. Respondents in the first

subpart were asked to specify their agreement level to different statements regarding "*privacy concerns*" using the same Likert-type scale. In the second subpart respondents were asked to specify how much they feel comfortable with elements in their profiles being visible by everyone.

- **Part V.** Focuses on the fourth of the five constructs of this study: "*Self-Disclosure on SNSs*". Respondents were asked to specify their agreement level to different statements about self-disclosure on SNSs (Likert-type scale) followed by a question asking respondents to indicate the elements they have in their personal Facebook profiles.
- **Part VI.** Focuses on the last of the five constructs of this study: "*Control over Personal Information on SNSs*". Respondents were asked about their "*Perception of the provided control*" (Likert-type scale) and the "*Applied control settings*" provided by Facebook: "*Privacy settings*", "*Timeline/tagging settings*", and *Blocking settings*".

4. Results and Analysis

The results in this section are listed according to the survey parts that tackled the five constructs of UPB on SNSs.

4.1 Friends and Relationships on SNSs

The first part of the survey was centered on "Friends and Relationships on SNSs". Table 2 shows the results of the first question which aimed at knowing the number of Facebook friends for each respondent. The collected data shows that approximately half of the respondents (i.e., 48.90%) have between 250 and 549 Facebook friends on average. Additionally, there was a desire to know the attitude towards the size of respondents' friends lists in order to study how their relationships on Facebook reflect actual ones; respondents were asked if they care to have large social friends lists. The question and the results are shown in Figure 1. As shown in the figure, the largest proportion of the sample (i.e., 42%) indicated YES, they like to have large lists given that the friends included in their lists are offline friends as well. The second largest proportion (i.e., 29%), indicated NO, they do not care to have large lists that they care more about quality rather than quantity. In that, we may conclude that the majority of respondents, formed from the previous proportions, care about having friends lists containing contacts they already know regardless the relationship type in reality (e.g., close friends, colleagues, regular professional contacts, etc.). In this regard, more investigation about the types of real life relationships maintained with contacts on Facebook is presented next.

Table 2: Results of number of Facebook friends

How many friends do you have on Facebook?		
Number	***Number of Users in %***	***Sum of % ∑***
< 49	1.84	34.19
50 - 149	9.19	
150 - 249	23.16	
250 - 349	19.85	48.90
350 - 449	16.91	
450 – 549	12.13	
550 – 649	5.88	13.60
650 – 749	5.51	
750 – 849	2.21	
850 – 949	2.21	3.31
950 – 1049	1.10	
> 1050	0.00	

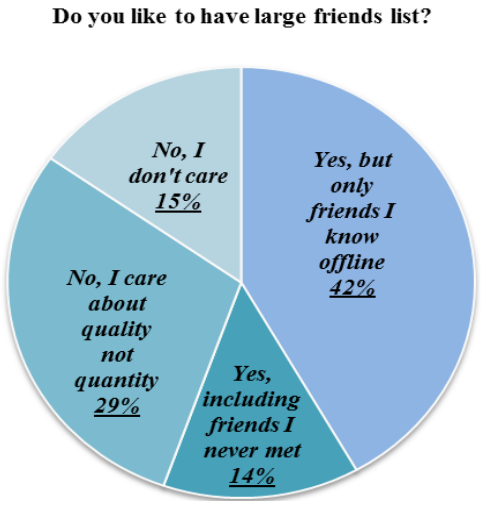

Fig. 1 Results of attitude towards having large friends list.

To better understand the social graph (i.e., list) of each respondent, this part aimed at studying the nature of relationships maintained in reality between respondents and their friends on Facebook. The results are presented in Table 3 in which the respective questions are listed in the left column while the mean values of the respondents indications (in %) towards each question are listed in the right column. From Table 3, we notice that a minor percentage constitutes those contacts that never been met in real life, and a small percentage of the friends list were considered as strangers. However, it can be noticed that about a little over a quarter of the relationships maintained on Facebook were considered close while more than half of the contacts in friends lists were considered casual encounters. Therefore, we may conclude that this could raise privacy concerns that respondents maintained more casual contacts than close friends in their friends lists. The ratio between close friends to casual encounters is 1:3.

Table 3: Results of real life relationships to Facebook friends

How many of your Facebook friends…	*Number of friends in %*
would you consider as close friends in real life?	27.3
are you in regular contact with in real life?	31.2
could you have a spontaneous conversation with, if you met them in real life?	56.8
would you consider as strangers in real life?	13.1
have you never met in real life?	7.9

4.2 Trust and Confidence on SNSs

"Trust and Confidence on SNSs" is the second part the survey addressed. This part is divided into two subparts: (1) "SNS users' trust in Facebook" and (2) "Trust in other SNS members".

4.2.1 Trust in Facebook

This subpart of the survey aimed at knowing to what extent Facebook as a SNS is trusted by its users. For that, respondents were asked to specify their agreement level to different items regarding trust in Facbook, using Seven Point Likert-type scale (i.e., from 1 (Strongly Disagree) to 7 (Strongly Agree)). The results are illustrated in Table 4 in which the survey statements regarding trust in Facebook are listed in the left column, while the right column shows the mean values of responses. The results which ranged from 3.83 to 4.48 indicate low to medium trust in Facebook. The lowest trust score was given to viewing Facebook as an honest SNS in its dealings with users; the same score was also given to considering Facebook a trustworthy medium in collecting and using users' personal information. Highest trust score was given to observing Facebook as keen to address most users' concerns.

Table 4: Results of Trust in Facebook

In general Facebook is:	*Mean*
is open and receptive to the needs of its members	4.39
makes good faith-efforts to address most members' concerns	4.48
is honest in its dealings with me	3.83
keeps its commitments to members	4.47
is trustworthy	3.94
tells the truth related to the collection and use of personal information	3.83
Is competent in protecting the information I provide	3.94

4.2.2 Trust in Other Facebook Users

The second subpart of "Trust and Confidence on SNSs" is "Trust in other SNS members". In relevance, respondents were asked to specify their agreement level to various statements related to trust in other Facebook users using Seven Point Likert-type scale. Table 5 demonstrates the results obtained for this subpart. The left column contains all mentioned items and the right column contains mean values of responses. From the results which ranged from 3.76 to 4.39 we may conclude that the overall trust in other members on Facebook is relatively low. The lowest trust score (i.e., 3.76) was given to considering Facebook users trustworthy. In this regard, we relate to the small percentage of those friends who were considered close friends, which constitutes a little over quarter of all friends, as shown in Table 3. Apparently, respondents were mostly concerned about their personal information being misused by others. In contrast, respondents were least concerned about being embarrassed for the information they make available to others on their Facebook profile.

Table 5: Results of Trust in other Facebook User

Statement: In general Facebook users:	*Mean*
will not misuse my sincerity on Facebook	4.20
will not embarrass me for information they learned about me through Facebook	4.39
will not use the information they found about me on Facebook against me	3.79
will not use the information about me in a wrong way	4.31
is trustworthy	3.76
are open and delicate to each other	4.03

4.3 Privacy Concerns

Facebook requires that users provide basic profile information upon registering their accounts. Users then are encouraged to add to their accounts extra personal information such as interests, occupation, relationship status, languages, etc.

To find out the users' privacy concerns, respondents were asked two questions in the survey. First question required that respondents specify their agreement level to several statements related to privacy concerns using Seven Point Likert-type scale. In the second question, respondents were asked to show how comfortable they were regarding several pieces of personal information being visible to other Facebook users. Before getting through the data collected for both questions, we go back to Table 1 where it can be noticed from the last item that about a quarter (i.e., 26.7%) of the respondents made their Facebook profiles visible to anyone, while more than half (i.e., 59.1%) of the respondents made their Facebook profiles visible to their friends in the social graph only. Relatively, a minor percentage (i.e., 14.2%) of respondents indicated that they had no idea whether their profiles are visible to the public or to friends only. In this regard, we may conclude that limiting the visibility to the one's social graph of about 60% of the respondents indicates that privacy concerns exist among the majority of users.

Table 6 shows the results to the first question regarding different privacy concerns. The left column contains the statements related to privacy concerns, while the right column indicates the mean values of all responses. From

Table 6, it can be noticed that respondents exhibited medium to high privacy concerns.

Table 6: Results of privacy concerns

I am concerned that my information submitted to Facebook…	***Mean***
can be used in a way I did not foresee	5.00
can become available to someone without my knowledge	5.17
can be misinterpreted	4.69
can be continuously spied on by someone unintended	4.45

The highest concern was the fear that one's information would become available to others without knowing that. The second highest concern was the fear that one's information could be used in unpredicted ways that the user might not be aware of. To gain better understanding of the one's information that might be compromised by others seeing them, respondents were asked about their comfort towards certain information being seen (i.e., accessed) by their friends. Table 7 shows the results obtained regarding this question. The highest comfort score (i.e., 6. 41%) was given to declaring "religion", which is not surprising since religion is explicitly declared in the Jordanian national ID, and it can be inferred from family names in the local society of Jordan. In addition, religion can be inferred from the religious symbols that are widely used in local society. Second highest comfort was given to "gender". In contrast, the least comfort score was given to "phone number" and "political views".

Table 7: Results of privacy concerns over personal information

I feel comfortable with Facebook users, including friends, seeing following information about me on my Facebook profile	***Mean***
Videos	2.72
Photos	2.31
Timeline	3.77
Status Updates	3.57
Religion	6.41
Political Views	2.15
Interests	5.16
Biography	5.06
Relationship Status	3.74
Profile Picture	3.27
Location/Street	2.63
Location/City	3.02
Location/Country	4.92
Hometown	4.01
Education	5.39
Employer	3.81
Phone number	2.15
Email	3.48
Birthdate	3.79
Nationality	5.14
Gender	6.26
Real Name	5.15

4.4 Self-Disclosure on SNSs

"Self-Disclosure on SNSs" is investigated through two questions in the survey. The 6 sub-questions of the first question along with the means collected for each are shown in Table 8. From the results, we notice that respondents agreed mostly to that their profile convey their preferences in books, music, or movies. In contrast, respondents indicated that they relatively do not have detailed profiles on Facebook as the mean agreement level was less than 4, which is considered low.

Table 8: Results of self-disclosure on SNSs

To which extent do you agree with the following statements?	***Mean***
I have a detailed comprehensive profile on Facebook	3.74
Personal information I publish on Facebook always represents the truth	4.62
I always find time to keep my profile up to date	4.76
My profile tells a lot about me	5.15
From my Facebook profile it would be easy to find out my preferences in books, music, or movies	5.56
From my Facebook profile it would be easy to understand what person I am	5.30

The second question was centered on finding out the existence of valid published personal information on respondents' profile pages, are illustrated in Table 9. The right column in the table contains the amount of respondents in percent who stated they have published valid information for the items in the left column.

Table 9: Results of self-disclosure on SNSs

Which personal information is included in your Facebook profile and corresponds to the truth?	***Percentage***
Videos	60%
Photos	90%
Religion	90%
Political Views	43%
Interests	78%
Biography	45%
Relationship Status	69%
Profile Picture	56%
Location/Street	43%
Location/City	64%
Location/Country	82%
Hometown	67%
Education	69%
Employer	69%
Phone number	20%
Email	36%
Birthdate	65%
Nationality	71%
Gender	89%
Real Name	67%

'Phone number" and "email" were the least valid information on Facebook as indicated by results. Only 20% of the respondents indicated they have valid "phone numbers" published on their profiles. In contrast, 90% indicated they published real "photos" that belong to them and the "religion" declared in the profile was true. In general, the validity of information ranged from somehow low to medium.

4.5 Control over Personal Information on SNSs

The survey part that addresses "Control over Personal Information on SNSs" is divided into two subparts: (1) "Perception of provided control", and (2) "Application of provided control" which is also divided into "Privacy", "Timeline and tagging", and "Blocking".

4.5.1 Perception of Provided Control

The survey included five questions to investigate the agreement level regarding several statements on users' perception of provided control by Facebook, using Seven Point Likert-type scale. Table 10 shows the mean values in the right column regarding the statements in the left column. From the results, it can be noticed that respondents agreed highly to that they are given sufficient control over who can view (i.e., access) their information on Facebook. The lowest agreement level was concerning having sufficient control oven when and how their information on Facebook can be used.

Table 10: Results of perceived control over personal information

Facebook provides me enough control over…	***Mean***
the information I provide on Facebook such as in my profile, on the wall, etc	4.53
how and in what case the information I provide can be used	3.69
who can collect and use the information I provide	3.58
who can view my information on Facebook	5.15
the actions of other users such as tagging, posting on my wall, etc.	4.22

Respondents were asked if they consider the given control over personal information on Facebook is adequate, or not. 107 respondents constituting approximately 39.3% indicated YES, while the remaining 165 constituting 60.7% indicated NO. Therefore, it can be concluded that respondents exhibited medium to low agreement to the adequacy of control Facebook gives them over their personal information.

4.5.2 Application of Provided Control

The following demonstrates the results of "Privacy", "Timeline and tagging" and "Blocking" settings in Facebook.

a. Privacy settings

Facebook provides its users control settings for "Privacy". These control settings are divided into: (1) "Who can see your future posts?", (2) "Who can look you up using the email address or phone number you provided?", and (3) "Who can look up your timeline by name?". Accordingly, the survey included questions about whether respondents adjusted their privacy settings by altering the given default ones. Table 11 shows the percentage of respondents who changed Facebook's default privacy settings.

Table 11: Results of adjusted privacy settings

Which of the following settings did you adjust?	***Percentage***
Who can see your future posts?	62.87
Who can look you up using the email address or phone number you provided?	47.79
Who can look up your timeline by name?	32.35

Users' attitude towards strangers contacting them on Facebook was also investigated in the survey. The results are shown in Table 12. We notice about half of the respondents communicated before they decided to accept or reject any stranger contact, while the rest are almost divided equally between ignoring contacts and asking to leave them alone.

Table 12: Results of contact initiated by strangers

How did you respond last time you were contacted on Facebook by someone who was a complete stranger to you?	***Percentage***
Just ignored it	21.69
Responded so I could find out more about the person	53.31
Responded and told them to leave me alone	25.00

a. Timeline and tagging

In Facebook, there is a special section including seven adjustable settings that allows users to control their timeline and tagging functionalities. In the survey, respondents were asked which default settings they altered. Table 13 shows the percentage of respondents who altered Facebook's default "Timeline and tagging" settings. We notice that the percentages of those who altered the default settings regarding "Timeline and tagging" are unsatisfying, which could be interpreted by unawareness of the existence of those settings.

b. Blocking

In Facebook, there are certain blocking settings by which a user can exclude users, apps, app invites and events invites from getting in contact with the user. Default settings given in Facebook do not block any of the mentioned units. The results are presented in Table 14. Again, the percentages of those who altered the default blocking settings are unsatisfying.

Table 13: Results of Timeline and tagging settings

Settings and Default	*Percentage*
Who can post on your timeline? Default: Friends	47.79
Who can see posts you have been tagged in on your timeline? Default: Friends of friends	32.35
Who can see what others post on your timeline? Default: Friends of friends	25.37
When you are tagged in a post, who do you want to add to the audience if they are not already in it? Default: Friends	17.65
Who sees tag suggestions when photos that look like you are uploaded? Default: Friends	17.65
Review posts friends tag you in before they appear on your timeline? Default: OFF	45.59
Review tags people add to your own posts before they appear on Facebook? Default: OFF	16.54

Table 14: Results of Blocked users, apps, app invites and event invites

Which of the following settings did you adjust?	*Percentage*
Do you block any users? Default: NONE	32.35
Do you block any apps? Default: NONE	47.79
Do you block any app invites? Default: NONE	37.50
Do you block any event invites? Default: NONE	18.38

5. Conclusion

SNSs offer novel, exciting means of communication; however, these ICT-based platforms raise privacy and security concerns. Cultures influences user behavior on SNSs, and thus UPB. While many studies addressed UPB in different parts of the world, very little information has been found regarding UPB in the MENA region: the heart of Arab Spring. This study utilized a quantitative approach to investigate UPB of Jordanian users, who are part of the MENA region, on Facebook. The findings in this study indicate that while users exhibited medium to high privacy concerns, more than one third of the respondents had visible Facebook profiles to anyone. The majority of respondents were found to care about having friends lists containing contacts they already know regardless the relationship nature in reality. However, with regards to the relationship nature, respondents maintained more casual contacts than close friends in their social graphs. Results indicate that users have low to medium trust in Facebook, with viewing Facebook as trustworthy and honest SNS in its dealings with users got the lowest trust score. Similarly, the overall trust in other members on Facebook was relatively low. In that regard, results show that respondents were mostly concerned about their personal information being misused by others. In contrast, they were least concerned about being embarrassed for the information they make available to others on their Facebook profiles. The highest privacy concern was the fear that one's information would become available to others without knowing that. The second highest concern was the fear that one's information could be used in unpredicted ways that the user might be unaware of. In terms of the information respondents were comfortable of others seeing, "religion" got the highest comfort score while "political views" and " phone number" got the lowest comfort score, although respondents indicated that they relatively do not have detailed profiles on Facebook. The validity of information published on Facebook was also studied. In general, the validity of information ranged from somehow low to medium. From the results, respondents exhibited medium to low agreement to the sufficiency of control Facebook gives them over their personal information. The findings in this study show that the percentages of those who altered the default settings regarding "Privacy", "Timeline and tagging" and "Blocking" settings are unsatisfying; this could be interpreted by unawareness of the existence of such settings.

The study gives insight and preliminary information to help raising awareness of local UPB on SNSs. In the future, there is an interest in conducting more in depth cross-cultural studies to identify differences in the UPB between users in the MENA region and users in the western world (e.g., USA, Germany, and UK) and users in the far east (i.e., China, Korea, and Japan).

References

[1] Boyd, D. and Ellison, N. (2008), "Social networking sites: definition, history, and scholarship", Journal of Computer-mediated Communications, Vol. 13 No. 1, pp. 210-30.

[2] Wang, Yang, Gregory Norice, and Lorrie Faith Cranor. "Who is concerned about what? A study of American, Chinese and Indian users' privacy concerns on social network sites." International Conference on Trust and Trustworthy Computing. Springer Berlin Heidelberg, 2011.

[3] Tsoi, Ho Keung, and Li Chen. "From privacy concern to uses of social network sites: A cultural comparison via user survey." Privacy, Security, Risk and Trust (PASSAT) and 2011 IEEE Third Inernational Conference on Social Computing (SocialCom), 2011 IEEE Third International Conference on. IEEE, 2011.

[4] Kisilevich S., Ang C., Last M., (2012), Large-scale analysis of self-disclosure patterns among online social networks users: a Russian context, First publ. in: Knowledge and Information Systems ; 32 (2012), 3. - pp. 609-628.

[5] https://www.facebook.com/

[6] http://www.statista.com/statistics/272014/global-social-networks-ranked-by-number-of-users/

[7] Arab Social Media Influencers. Arab Social Media Report. Arab Social Media Influencers, 2015. Web. 19 Jul. 2016.

[8] Sawyer, Rebecca, "The Impact of New Social Media on Intercultural Adaptation" (2011).Senior Honors Projects.Paper 242. http://digitalcommons.uri.edu/srhonorsprog/242

[9] Hamilton, A. (2007, December 3). Is Facebook overrated? Time, 170(23), 48-51.

[10] Marshall, Bryan A., et al. "Social networking websites in India and the United States: A cross-national comparison of

online privacy and communication."Issues in Information Systems, IX 2 (2008): 87-94.
[11] Falk, Sebastian, and Nils Riel. "Cultural Differences in User Privacy Behavior on Social Networking Sites: An Empirical Study comparing German and Swedish Facebook Users." (2013).
[12] Dunne, A., Lawlor, M., Rowley, J.: Young People's Use of Online Social Networking Sites - a Uses and Gratifications Perspective. Journal of Research in Interactive Marketing, Vol. 4 Iss: 1, pp.46 - 58. 2010.
[13] Pfeil, Ulrike, Raj Arjan, and Panayiotis Zaphiris. "Age differences in online social networking–A study of user profiles and the social capital divide among teenagers and older users in MySpace." Computers in Human Behavior 25.3 (2009): 643-654.
[14] Kluemper DH, Rosen PA (2009) Future employment selection methods: evaluating social networking web sites. Journal of Managerial Psychology 24(6):567–580. doi:10.1108/02683940910974134
[15] Livingstone, Sonia. "Taking risky opportunities in youthful content creation: teenagers' use of social networking sites for intimacy, privacy and self-expression." New media & society 10.3 (2008): 393-411.
[16] Golijan, R. (2012). Consumer Reports: Facebook privacy problems are on the rise - NBC News.com. NBC News. Retrieved June 10, 2016, from http://www.nbcnews.com/technology/technolog/consumer-reports-facebookprivacy-problems-are-rise-749990
[17] Kim, Yoojung, Dongyoung Sohn, and Sejung Marina Choi. "Cultural difference in motivations for using social network sites: A comparative study of American and Korean college students." Computers in Human Behavior27.1 (2011): 365-372.
[18] Brandtzæg, P. B., & Heim, J. (2009). Why people use social networking sites. Lecture Notes in Computer Science, 5621, 143–152.
[19] Jung,T.,Youn,H.,&McClung,S.(2007).Motivations and self-presentation strategies on Korean-based ‘‘Cyworld’’ weblog format personal homepages. CyberPsychology and Behavior, 10(1), 24–31.
[20] Raacke, John, and Jennifer Bonds-Raacke. "MySpace and Facebook: Applying the uses and gratifications theory to exploring friend-networking sites." Cyberpsychology & behavior 11.2 (2008): 169-174.
[21] Katz,E.,Blumler,J.G.,&Gurevitch,M.(1974).Utilizationofmasscommunicationby the individual. In J. G. Blumer & E. Katz (Eds.), The uses of mass communications: Current perspectives on gratifications research (pp. 19–32). Beverly Hills, CA: Sage.
[22] Lin, C. A. (1999). Online-service adoption likelihood. Journal of Advertising Research, 39(2), 79–89.
[23] Rubin, A. M. (1994). Media uses and effects: A uses-and-gratifications perspective. In J. Bryant & D. Zillimann (Eds.), Media effects: Advances in theory and research (pp. 417–436). Hillsdale, NJ: Erlbaum.
[24] Cheung, Christy MK, Pui-Yee Chiu, and Matthew KO Lee. "Online social networks: Why do students use facebook?." Computers in Human Behavior27.4 (2011): 1337-1343.
[25] Yang, Jiang, et al. "Culture Matters: A Survey Study of Social Q&A Behavior." ICWSM 11 (2011): 409-416.
[26] Veltri, N.F., & Elgarah, W. (2009, March). The role of national cultural differences in user adoption of social networking. Paper presented at the Southern Association for Information Systems Conference, Charleston, SC.
[27] Milberg, Sandra J., H. Jeff Smith, and Sandra J. Burke. "Information privacy: Corporate management and national regulation." Organization science 11.1 (2000): 35-57.
[28] Gudykunst, W. B., & Kim, Y. Y. (1997). Communicating with strangers: An approach to intercultural communication (3rd ed.). New York: McGraw-Hill.
[29] Cho, Young-Ju, Brent Mallinckrodt, and Sook-Keyong Yune. "Collectivism and individualism as bicultural values: South Korean undergraduates' adjustment to college." Asian Journal of Counselling 17.1/2 (2010): 81-104.
[30] Lewis, C. C., & George, J. F. (2008). Cross-cultural deception in social networking sites and face-to-face communication. Computers in Human Behavior, 24(6), 2945–2964.
[31] Krasnova, H., & Veltri, N. F. (2010). Privacy Calculus on Social Networking Sites: Explorative Evidence from Germany and USA. In 2010 43rd Hawaii International Conference on System Sciences (HICSS) (pp. 1–10). Presented at the 2010 43rd Hawaii International Conference on System Sciences (HICSS).
[32] Krasnova, H., Veltri, N. F., & Günther, P. O. (2012). Self-disclosure and Privacy Calculus on Social Networking Sites: The Role of Culture. Business & Information Systems Engineering, 4(3), 127–135.

Nancy Alajarmeh received the B.S. degree in Computer Information Systems from The University of Jordan in 2004, and the PhD degree in Computer Science from New Mexico State University in 2014. Since 2014 till the date she has been working as an assistant professor at the Department of Computer and Information Technology at Tafila Technical University, JORDAN.